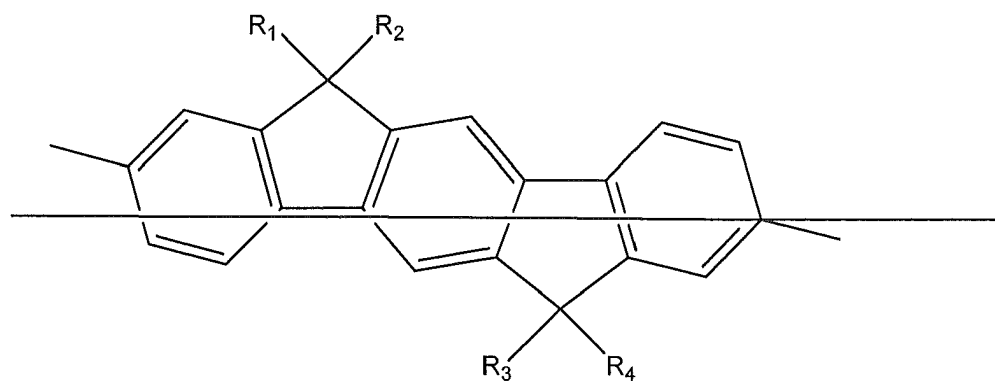
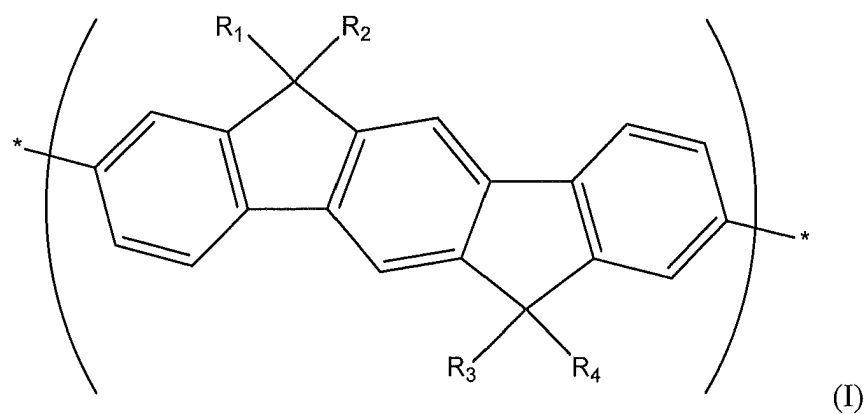


AMENDMENT TO THE CLAIMS

1. (Currently Amended) A polymer comprising optionally substituted first repeat units of formula (I):



(\oplus)



wherein

* indicates the position that formula (I) is bonded to the polymer chain.

wherein R₁, R₂, R₃ and R₄ are selected from ~~hydrogen~~, alkyl, alkyloxy, aryl, aryloxy, heteroaryl or heteroaryloxy groups, and R₁ and R₂ and / or R₃ and R₄ may be linked to form a monocyclic or polycyclic, aliphatic or aromatic ring system, provided that at least one of R₁, R₂, R₃ and R₄ comprises an aryl or heteroaryl group.

2. (Original) A polymer according to claim 1 wherein at least two of R₁, R₂, R₃ and R₄ comprise an aryl or heteroaryl group.

3. (Original) A polymer according to claim 1 wherein at least three of R₁, R₂, R₃ and R₄ comprise an aryl or heteroaryl group.

4. (Original) A polymer according to claim 1 wherein R₁, R₂, R₃ and R₄ comprise an aryl or heteroaryl group.

5. (Original) A polymer according to claim 1 wherein R₁ and R₂ comprise an aryl or heteroaryl group and R₃ and R₄ comprise an alkyl group.

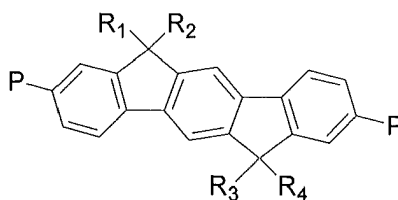
6. (Previously presented) A polymer according to claim 5, wherein said aryl group comprises an optionally substituted phenyl group.

7. (Previously presented) A polymer according to claim 2 wherein said aryl group comprises a 4-octylphenyl group or a 4-*tert*-butyl-phenyl group.

8. (Previously presented) A polymer according to claim 1 comprising a second repeat unit.

9. (Previously presented) A polymer according to claim 8 wherein said second repeat unit is selected from the group consisting of triarylamines and heteroaromatics.

10. (Withdrawn) A monomer comprising an optionally substituted compound of formula (II):



(II)

wherein each P independently represents a polymerisable group and R₁, R₂, R₃ and R₄ are

independently hydrogen, alkyl, alkyloxy, aryl, aryloxy, heteroaryl or heteroaryloxy groups, and R₁ and R₂ and / or R₃ and R₄ may be linked to form a monocyclic or polycyclic, aliphatic or aromatic ring system, provided that at least one of R₁, R₂, R₃ and R₄ comprises an aryl or heteroaryl group.

11. (Withdrawn) A monomer according to 10 wherein each P is independently selected from a reactive boron derivative group selected from a boronic acid group, a boronic ester group and a borane group; a reactive halide group or a moiety of formula -O-SO₂-Z wherein Z is selected from the group consisting of optionally substituted alkyl and aryl.

12. (Withdrawn) A process for preparing a polymer comprising a step of reacting a first monomer wherein said first monomer is the monomer as defined in claim 10 and a second monomer that may be the same or different from the first monomer under conditions so as to polymerise the monomers.

13. (Withdrawn) A process for preparing a polymer according to claim 12 which comprises polymerising in a reaction mixture:

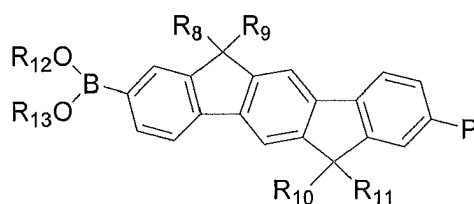
- (a) said first monomer wherein each P is a boron derivative functional group selected from a boronic acid group, a boronic ester group and a borane group, and an aromatic monomer having at least two reactive functional groups independently selected from halides or a moiety of formula -O-SO₂-Z ; or
- (b) said first monomer wherein each P is independently selected from the group consisting of reactive halide functional groups functional groups independently selected from halides and a moieties of formula -O-SO₂-Z and Z is as defined in claim 11, and an aromatic monomer having at least two boron derivative functional groups selected from boronic acid groups, boronic ester groups and borane groups; or

- (c) said first monomer wherein one P is a reactive halide functional group or a moiety of formula $-\text{OSO}_2\text{-Z}$ and Z is selected from the group consisting of optionally substituted alkyl and aryl, and the other P is a boron derivative functional group selected from a boronic acid group, a boronic ester group and a borane group,

wherein the reaction mixture comprises a catalytic amount of a catalyst suitable for catalysing the polymerisation of the aromatic monomers, and a base in an amount sufficient to convert the boron derivative functional groups into boronate anionic groups.

14. (Previously presented) An organic light emitting device comprising a polymer according to claim 1.

15. (Withdrawn) A monomer comprising an optionally substituted repeat unit of formula (III):



(III)

wherein R_8 , R_9 , R_{10} , R_{11} , R_{12} and R_{13} are the same or different and independently represent hydrogen, alkyl, alkyloxy, aryl, aryloxy, heteroaryl or heteroaryloxy groups, and R_8 and R_9 , R_{10} and R_{11} or R_{12} and R_{13} may be linked to form a monocyclic or polycyclic, aliphatic or aromatic ring system; one or more of the pairs of R_8 and R_9 , R_{10} and R_{11} or R_{12} and R_{13} may be linked to form a ring; and P independently represents a polymerisable group.

16. (Withdrawn) A monomer according to claim 15 wherein R_8 , R_9 , R_{10} and R_{11} are independently selected from the group consisting of optionally substituted alkyl, alkoxy, aryl, aryloxy, heteroaryl or heteroaryloxy.

17. (Withdrawn) A monomer according to claim 15, wherein P is selected from the group consisting of functional halogens, a monovalent unit of formula $-\text{OSO}_2\text{Z}$ or a monovalent unit of formula $-\text{B}(\text{OR}_{14})(\text{OR}_{15})$ wherein R_{14} and R_{15} are the same or different and independently

represent hydrogen or a substituent R_{12} and R_{13} and may be linked to form a ring; and Z is selected from the group consisting of optionally substituted alkyl and aryl.

18. (Withdrawn) A monomer according to claim 17, wherein R_{12} , R_{13} , R_{14} and R_{15} are the same or different and are selected from the group consisting of hydrogen and optionally substituted alkyl.

19. (Withdrawn) A monomer according to claim 18 wherein R_{12} and R_{13} and / or R_{14} and R_{15} are linked to form an optionally substituted ethylene group.

20. (Withdrawn) A process for preparing a polymer which comprises polymerising in a reaction mixture:

- (a) said monomer according to claim 15, wherein P is a group of formula –
 $B(OR_{14})(OR_{15})$ and R_{14} and R_{15} are the same or different and independently represent hydrogen or a substituent R_{12} and R_{13} , and an aromatic monomer having at least two reactive functional groups independently selected from halide or moieties of formula $-O-SO_2-Z$ and Z is as defined in; or
- (b) said monomer, wherein P is a reactive halide functional group or a moiety of formula $-O-SO_2-Z$ and Z is selected from the group consisting of optionally substituted alkyl and aryl,

wherein the reaction mixture comprises a catalytic amount of a catalyst suitable for catalysing the polymerisation of the aromatic monomers, and a base in an amount sufficient to convert the boron derivative functional groups into boronate anionic groups.

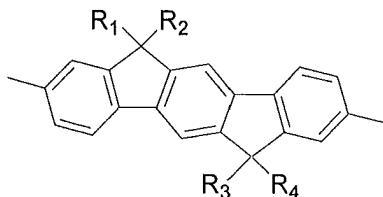
21. (Withdrawn) A switching device comprising the polymer according to claim 9.

22. (Withdrawn) A field effect transistor comprising an insulator having a first side and a second side; a gate electrode located on the first side of the insulator; a polymer according to claim 1 located on the second side of the insulator; and a drain electrode and a source electrode located on the polymer.

23. (Withdrawn) An integrated circuit comprising a field effect transistor according to claim 22.

24. (Withdrawn) A photovoltaic cell comprising a polymer according to claim 1.

25. (Previously presented) The A polymer as claimed in claim 1 comprising first repeat units of formula (I):



(I)

wherein R₁, R₂, R₃ and R₄ are selected from hydrogen, alkyl, alkyloxy, aryl, aryloxy, heteroaryl or heteroaryloxy groups, and R₁ and R₂ and / or R₃ and R₄ may be linked to form a monocyclic or polycyclic, aliphatic or aromatic ring system, provided that at least one of R₁, R₂, R₃ and R₄ comprises an aryl or heteroaryl group.